



EDUCATION AND TRAINING

# Educating Women about Technology

By Renee Ho

Mobile technology is improving the lives of illiterate women and girls in rural Senegal, and educating them in the process, thanks to an organization that teaches them to use mobile phones.

Astou watches as the photographer raises his camera to capture the crowded village classroom. She adjusts her nursing infant and turns her own camera on him — only hers is a mobile phone. For the past few weeks, Astou has been participating in a community-led mobile technology course taught in her local language of Wolof. She and hundreds of other women and girls throughout rural Senegal have learned how to make and receive calls, compose and send SMS messages and use phone functions such as calculators, alarms and, yes, sometimes even cameras.

Astou is a bright 24-year-old mother of four children. She had seen her husband use a mobile phone, but prior to this class she had never touched one herself. “Before, he would not let me use the phone because he feared I would waste the credit,” she laughs, “but now he asks me to teach him and we are saving to buy another for me.”



The Tostan Jokko community empowerment program teaches women to use mobile phones. *Courtesy Tostan Jokko*

Two years ago, Astou was not only unfamiliar with how to use a mobile phone, but she was illiterate. Composing or reading an SMS text message would have been impossible for her. Like most of the women and girls in her village in the region of Vélingara, Senegal, Astou never attended school. Household responsibilities and the cost of schooling prevented her from receiving a formal education. She married at 16 years of age — the average age for girls in rural Senegal.

In a country with a 41.9 percent literacy rate, Astou is breaking norms and the cyclical trap of poverty. In 2008, Tostan, an

international nongovernmental development organization, started the Community Empowerment Program (CEP) — a 30-month human rights-based, nonformal education program — in her village. More than 80 percent of CEP participants are women and girls.

They begin the program with sessions on human rights, democracy, health and hygiene and problem-solving. Later, they continue with lessons on literacy, numeracy and project management.

Once participants have achieved basic literacy, however, they often lack a practical means of maintaining it. As a solution, Tostan partnered with UNICEF to

launch the Jokko Initiative in 2009 (jokko means “communication” in Wolof). The initiative incorporates mobile technology into CEP as way to reinforce reading and writing skills. The Jokko module teaches participants how to use basic mobile phone functions and SMS texting. It uses interactive visuals and skits that focus on relevant applications and the relative affordability of texting. “I text messages better [than my husband] and that saves us money on expensive calls,” explains Astou.

Outside of the classroom, students circle around a strange arrangement of sticks. With a little explanation, the sticks come to represent a mango tree. Khady, age 52, walks along the “tree branches” and stops at each fork where signs are placed: Contacts, Search, Add Contact. This activity teaches participants how to navigate the phone’s main menu. It is just one example of what makes Tostan’s educational model work: adapting lessons to cultural contexts and using appropriate local references.

“Before, if I wanted to send a text message, I had to ask for help,” Khady says, “but now I am much more independent. Now people come to me and I’m happy to teach them.” When mobile phone technology reaches women and girls, it amplifies their voices and influence in community decisionmaking. They become agents of their own change. Khady continues to explain how the CEP provided her with basic math and management skills. With several boys and girls huddled around, she demonstrates how the

phone’s calculator helps her manage her peanut-selling business.

Mobile phone technology has connected women and girls to market information and opportunities, family in the diaspora and, perhaps most fundamentally, to each other. The phones have been critical for community organization and social mobilization. Tostan’s Jokko Initiative has developed a unique social networking platform that allows participants to send an SMS message to a central server, where it is then sent out to an entire community of other users. One participant explains, “It’s when you send multiple messages at once — a cheaper method of communication.” The platform is used for community advocacy campaigns. Women send, for example, reminders of vaccination and school enrollment dates.

The Jokko Initiative has reached 350 villages and continues to grow. Tostan has directly trained about 23,585 people, but the high demand for knowledge and the eagerness of participants to share information suggests that thousands more have benefited.

In the project’s next phase, Tostan will partner with the Rural Energy Foundation, a nonprofit organization that helps rural communities gain access to renewable energy. Currently, about 80 percent of rural Senegal lacks electricity, so charging phones often involves risky and inconvenient trips into the nearest small town. To alleviate this, Tostan will pilot community-led, solar-powered charging stations. These



Women, some of them illiterate, learn to navigate the main menu of a mobile phone through an arrangement of branches on the ground. *Courtesy Tostan Jokko*

telecenters will provide electricity for mobile phones, and the income generated by these microenterprises will be reinvested in other community-led development projects.

Mobile phone use in Africa is growing twice as fast as in any other region in the world. In Senegal, the number of SIM card purchases nearly doubled from 2007 to 2009, up to 6.9 million. But as Tostan has found, absolute numbers alone do not empower communities. Success in low-income countries requires bridging the gender gap. Putting knowledge and technology in the hands of women — literally — is critical to achieving lasting development.

Renee Ho is a volunteer at Tostan International in Dakar, Senegal. Her interests include women and the technology divide in lower-income countries. More information is online at [www.tostan.org](http://www.tostan.org).